



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

The Age of Uncertainty: Reliability and Social Performance

Dr Kathryn Sturman, Senior Research Fellow
Centre for Social Responsibility in Mining
Sustainable Minerals Institute

This Presentation

- ❑ Why it is timely to consider HRO model in broad terms:
SHE + SG = holistic risk assessment and performance
- ❑ Need to understand context inside and outside organisation
- ❑ Reframing risk to business, as risk to *people*
- ❑ Building trust as ultimate measure of reliability



["Compass Study"](#) by [Calsidyrose](#), [CC BY 2.0](#)

What does it take to be an HRO in the mining industry?

Literature tends to define HROs in terms of narrow definition of high risk:

“...the kind of organisation... where a single error, if not contained, could cause not one fatality, but hundreds.”
(Hopkins, 2010:3)

In the mining industry, accidents and oversights can cause:

- Injuries and fatalities
- Health problems for employees and communities
- Harm to environment
- Harm to people’s livelihoods
- Harm to cultural heritage



Photo by K.Sturman, 2017

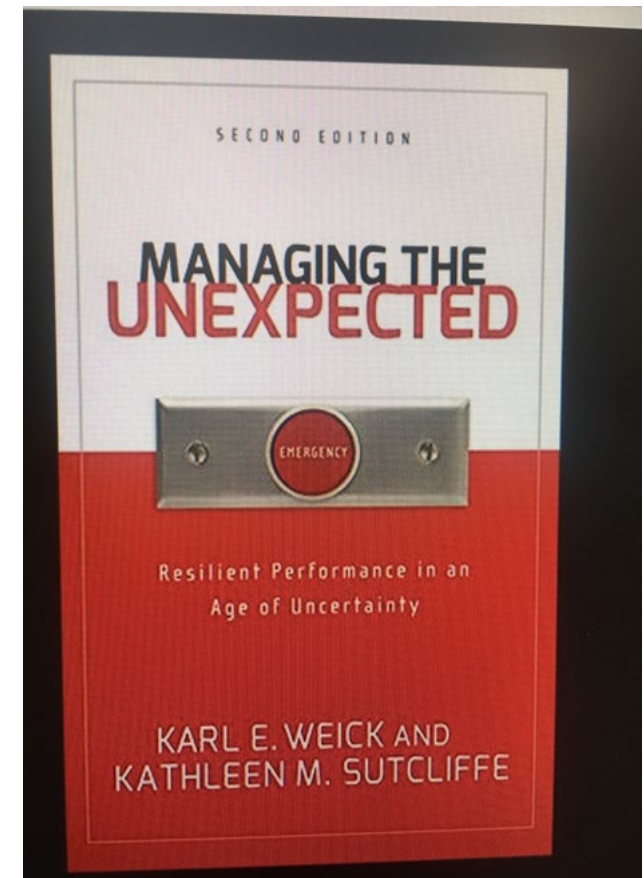
Finding the way in uncertain times...

HROs are considered to be better prepared than other organisations for unexpected events

Why?

“HROs practice a form of organising that reduces the brutality [of these events]... and speeds up the process of recovering”

- Weik & Sutcliffe, 2011:1



Revisiting the Age of Uncertainty

Unpredictable external context:

- Global pandemic
- Commodity price volatility
- Automation and big data
- Energy transition
- Extreme weather events
- Geopolitical tensions
- Social movements for change

["Smoke from the Australian bushfires"](#) by [NASA Johnson](#), [CC BY-NC-ND 2.0](#)



Understanding context inside and out

The organisation is *of* and *within* its context, e.g.

- Attitudes toward women impact on their safety, participation in the economy and career progression
- Shift from safety & health at work, to wellness and work-life balance, sees the whole employee – in her home, travelling to work and at work = better performance & reliability of organisation
- 40% of FIFO workers reported feeling lonely or socially isolated (Fold et al, 2013) = affects performance & reliability of organisation
- *Strong and Sustainable Resource Communities Act, 2017 Review* (December 2020) found positive benefits to local communities
- Live local initiatives by companies may account for these benefits as well as the new regulation.



Photo by K. Sturman, 2018

Mindfulness of the big picture

“...less simplification allows you to see more... knowing that the world they face is complex, unstable, unknowable and unpredictable, HROs position themselves to see as much as possible.”

(Weick & Sutcliffe, 2011: 10)

Counter-intuitive to traditional risk management strategy:

Requires an integrated, whole of business approach, across functions

- Safety, health management
- Environmental management
- Social investment/ community relations
- Communications
- Governance



Expecting the unexpected...

Impact of disasters multi-faceted – safety, health, social, economic and environmental impacts:

- Hazelwood coal fire
- Brumadinho tailings dam failure
- Juukan Gorge destruction of rock shelters

Slow-moving disasters:

- Pandemic lockdown
- Long latency diseases
- CO2 emissions

Disaster risk = hazard + vulnerability



"Black Swan." by [Bernard Spragg](#), [CC0 1.0](#)

Global Industry Standard on Tailings Management

Topic 1: Affected communities

Principle 1: Respect the rights of project-affected people and meaningfully engage them at all phases of the tailings facility lifecycle, including closure

Topic 2: Integrated knowledge base

Principle 2: Develop an interdisciplinary knowledge base

Principle 3: Use all elements of the knowledge base – social, environmental, local economic and technical – to inform decisions

Topic 3: Design, construction, operation and monitoring of the tailings facility

Topic 4: Management and governance

Principle 11: Develop an organisational culture that promotes learning, communication and early problem recognition

Topic 5: Emergency response and long-term recovery

Principle 14: Prepare for long-term recovery in the event of catastrophic failure

Topic 6: Public disclosure and access to information

Principle 15: Publicly disclose and provide access to information about the tailings facility to support public accountability

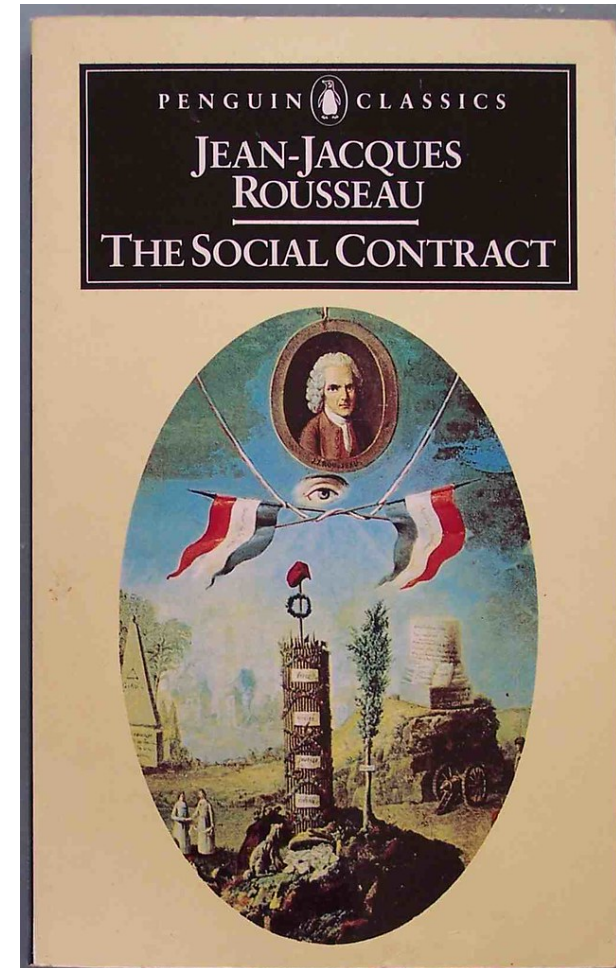
Shifting from SLO to HRO?

Social license to operate means...

- A relationship, not once-off approval
- Needs work (more like a marriage licence than a mining licence)
- Not transactional – prioritises risks to *people*, not operational, financial or reputational risk

Like Rousseau's Social Contract between government and citizen, one side has more power than the other, but that power rests on legitimacy, not force.

Multi-stakeholder engagement of government, civil society, company and community



"social contract" by [cdrummbks](#), CC BY 2.0

The dimensions of trust

We can trust people or organizations for one or more of the following reasons.

We see them as:

- a. *competent* (they're up to the job);
- b. *moral* (they have good values; integrity);
- c. *reliable* (they do what they say they will);
- d. *aligned* (we have common or compatible interests and values).

Ultimately, it is not leaders, staff or auditors who recognise an HRO...



"Friends" by [h.kopdelaney](https://www.flickr.com/photos/hkopdelaney/) is licensed under [CC BY-ND 2.0](https://creativecommons.org/licenses/by-nd/2.0/)



Questions

Contact details: Dr Kathryn Sturman

T +61 7 33464006

E k.sturman@uq.edu.au

W smi.uq.edu.au